

CLASSIFICATION CONFIDENTIAL
SECURITY INFORMATION
CENTRAL INTELLIGENCE AGENCY
INFORMATION FROM
FOREIGN DOCUMENTS OR RADIO BROADCASTS

25X1A

REPORT NO.

CD NO. ---

COUNTRY USSR
SUBJECT Economic; Technological - Bearing industry
HOW PUBLISHED Daily newspapers
WHERE PUBLISHED USSR
DATE PUBLISHED 16 Sep - 27 Nov 1952
LANGUAGE Russian

DATE OF INFORMATION 1952

DATE DIST. 18 Mar 1953

NO. OF PAGES 4

SUPPLEMENT TO REPORT NO.

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES, WITHIN THE MEANING OF TITLE 18, SECTIONS 793 AND 794, OF THE U.S. CODE, AS AMENDED. ITS TRANSMISSION OR REVELATION OF ITS CONTENTS TO OR RECEIPT BY AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW. THE REPRODUCTION OF THIS FORM IS PROHIBITED.

THIS IS UNEVALUATED INFORMATION

ILLEGIB

SOURCE Newspapers as indicated.

ANTI-FRICTION BEARING OUTPUT AT USSR PLANTS

LACK AUTOMATIC CONTROL INSTRUMENTS -- Moscow, Pravda, 5 Oct 52

At the Moscow First State Bearing Plant, there are 120 workers engaged in secondary tasks (in machinery and repair shops, in tool shops, in transport, and as inspectors in the Division of Technical Control) for every 100 workers engaged directly in commodity output. The same ratio exists at other bearing industry enterprises. Controllers and inspectors make up 30 percent of the workers in plants of the bearing industry.

At the First State Bearing Plant, control operations for a 24-hour period involve making 14 million measurements, and practically all of these operations are carried out by hand. It is true that the number of control and measuring instruments in the bearing industry has increased 1.7 times in 3 years, but this has brought no appreciable reduction in the number of controllers and inspectors. The reason for this is that the Ministry of Machine Tool Building has increased the output of control and measuring instruments, but all these instruments are manual, and what the bearing industry needs is automatic instruments. The industry badly needs an optical instrument to replace the human eye in controlling the surface quality of machined parts, but neither the Ministry of Machine Tool Building nor the Ministry of Machine and Instrument Building produces such an instrument.

It is time to stop building the most complex and important units of machine tools in machinery and repair shops of plants and assign their mass production to the Ministry of Machine Tool Building.

Failure of metallurgical plants to supply metal on time and in the variety of types ordered is still disrupting the production schedules of machine building plants.

- 1 -

25X1A

25X1A

CONFIDENTIAL

The Ministry of Railways is contributing to the delay by failing to deliver metal and other materials on time. Fifteen percent of the metal-carrying railroad cars arriving at the First State Bearing Plant take from 5 to 12 days more than the established time for the trip. -- V. Devyatov, director, First State Bearing Plant imeni L. M. Kaganovich.

CUT COSTS, RAISE OUTPUT -- Petrozavodsk, Leninskoye Znanya, 16 Sep 52

The Moscow First State Bearing Plant imeni L. M. Kaganovich has saved 8.5 million rubles since the beginning of 1952 by putting innovations into effect. The tool shop found a method for reconditioning worn-out parts of dies which previously were thrown away. This method enabled the shop to save about 25 tons of expensive tool steel.

Petrozavodsk, Leninskoye Znanya, 30 Sep 52

The Moscow First State Bearing Plant fulfilled its 9-month plan on 27 September 1952. The plant showed a profit of 6,500 rubles above the plan since the beginning of 1952 and reduced production costs 15 percent.

Moscow, Moskovskaya Pravda, 28 Oct 52

In the course of the Fourth Five-Year Plan, the Moscow First State Bearing Plant increased total output six times, output of large-size bearings six times, and output of precision bearings more than eight times; and organized the production of more than 400 new type-sizes of bearings. In this same period, the number of workers at the plant only doubled, and production area remained the same; hence, the increased output may be attributed to greater labor productivity.

In 1951, more than 5,402 plant workers were given production and technical training. More than 2,000 workers raised their qualifications in the first three quarters of 1952, and 1,667 workers are now in training. In addition, 1,045 workers and 191 engineers and technicians are studying in tekhniums and institutes.

The First State Bearing Plant carries out 14 million control operations daily, so that mechanization of control work is of the utmost importance. In the past 3 years, the plant has built several dozen automatic control instruments. This made it possible to reduce by 500 the force of controllers and inspectors.

Between 1949 and the third quarter 1952, labor productivity increased more than 60 percent, output per unit of equipment increased 70.1 percent, and output per square meter of production area increased 78.7 percent. -- N. Kabanov, chief, Division of Labor and Wages, First State Bearing Plant

INSTITUTE MECHANIZES BEARING OUTPUT -- Moscow, Moskovskaya Pravda, 22 Nov 52

The Experimental Scientific Research Institute of the Bearing Industry has worked in close cooperation with the Moscow First State Bearing Plant for several years. The institute, together with workers of the plant and of TsNITMASH (Central Scientific Research Institute of Technology and Machine Building), was first in the world to perfect a method of continuous rolling of balls to replace the old method of hot stamping. One high-productivity machine for continuous rolling can fulfill the plant's weekly requirement for balls in one shift.

- 2 -

CONFIDENTIAL

25X1A

CONFIDENTIAL

The institute's ball laboratory, headed by S. Baykov, has developed a high-speed method of producing balls that is widely used in bearing enterprises.

After 3 years of intensive work, the institute developed five models of original high-frequency electric grinding spindles. About 200 grinding machines have been equipped with these spindles in the bearing industry alone. The special equipment laboratory, together with the tool shop of the bearing plant, is now working on a new powerful electric spindle.

All innovations and inventions proposed at the enterprises are studied by the institute, and the most promising ones are developed further.

The institute is planning and building the first automatic line in the world for carrying out all operations in bearing production from the forging of rings to the packaging of finished bearings. Twenty or thirty workers will operate a section which formerly required hundreds of workers. The new line will be set up at the Moscow First State Bearing Plant during the Fifth Five-Year Plan.

Bearing production processes are still unnecessarily slow, often taking from one to 3 months.

Metal consumption must be reduced two to three times, and nonferrous metals must be replaced by high-quality, inexpensive substitutes. At present, successful experiments are being conducted in replacing brass with iron and graphitized steel. The production of special types of bearings -- anti-magnetic, noiseless, anticorrosion, and dielectric -- is being organized on a large scale.

Moscow, Moskovskaya Pravda, 26 Nov 52

At the Moscow First State Bearing Plant, specific consumption of electric power has been reduced from 1,007 to 771 kilowatt-hours per ton of finished output.

PLANT TO DOUBLE BEARING OUTPUT -- Moscow, Moskovskaya Pravda, 15 Nov 52

The Moscow Second State Bearing Plant has been assigned the task of doubling its output in the next 2 or 3 years without acquiring additional equipment or floor space.

High-speed methods for filing balls have been introduced at the plant for the first time, and the spindle speeds of filing machines raised from 70 to 250 revolutions per minute. Use of a mechanical device to load balls into the filing machine made it possible for one operator to run eight to ten filing machines instead of two. -- A. Mel'nikov, chief technologist, Moscow Second State Bearing Plant

MEETS PLAN -- Moscow, Pravda, 27 Nov 52

On 25 November 1952, the Moscow Second State Bearing Plant fulfilled its 11-month commodity output plan.

- 3 -

CONFIDENTIAL

ILLEGIB

25X1A

CONFIDENTIAL

FULFILLS QUOTA EARLY -- Moscow, Moskovskaya Pravda, 5 Oct 52

The Moscow Bearing Repair Plant fulfilled its gross and commodity output plans for the first 10 months of 1952 on 4 October.

ABOVE-PLAN BEARINGS -- Tashkent, Pravda Vostoka, 24 Sep 52

The Tashkent Bearing Repair Plant fulfilled its 9-month production plan 16 days ahead of schedule, turned out more than 100,000 rubles' worth of above-plan production, and exceeded its plan for cost reduction. By the end of September 1952, the plant will turn out more than 300,000 rubles' worth of production above plan.

TOMSK PLANT EXCEEDS QUOTA -- Moscow, Komsomol'skaya Pravda, 11 Oct 52

The Tomsk Bearing Plant fulfilled its plan for the first 9 months of 1952 on time and produced tens of thousands of bearings above plan.

The forge shop turns out 400,000 rings above the plan every day, and the multispindle automatics shop turns out 14,000 items above the plan daily.

FALL SHORT OF PRODUCTION PLAN -- Baku, Bakinskiy Rabochiy, 12 Nov 52

The plan for bearing production in the Azerbaydzhan SSR was fulfilled 87 percent during the third quarter 1952.

- E N D -

- 4 -

CONFIDENTIAL